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EUROPEAN PATENT APPLICATION

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(71) Applicant: **Pfizer Products Inc.**
Groton, Connecticut 06340 (US)

(72) Inventor: **Latles, Alan Malev**
Philadelphia, Pennsylvania 19119 (US)

(74) Representative:
McMunn, Watson Palmer et al
Pfizer Limited
Patents Department
Ramsgate Road
Sandwich, Kent CT13 9NJ (GB)

(54) **Methods and compositions for treating diseases and conditions of the eye**

(57) Methods for the prevention and treatment of diseases and conditions of the eye including, but are not limited to: central retinal artery occlusion; central retinal vein occlusion; optic neuropathy including, but not limited to, anterior ischemic optic neuropathy and glaucomatous optic neuropathy; and macular (dry) degeneration are disclosed. These methods comprise administering to a patient a prophylactically or therapeutically effective amount of a cyclic guanosine 3',5'-monophosphate phosphodiesterase type 5 inhibitor. Pharmaceutical compositions and dosage forms comprising cyclic guanosine 3',5'-monophosphate phosphodiesterase type 5 inhibitors are also disclosed.

EP 1 074 258 A3



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PARTIAL EUROPEAN SEARCH REPORT

Application Number

which under Rule 45 of the European Patent Convention shall be considered, for the purposes of subsequent proceedings, as the European search report

EP 00 30 6235

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
D,X	US 5 250 534 A (BELL ANDREW S ET AL) 5 October 1993 (1993-10-05) * abstract * * column 1, line 11 - line 39 * * column 2, line 64 - column 3, line 19 * * column 6, line 5 - line 21 * * column 6, line 41 - column 7, line 24 * * example 12 * * claims 1-4 *	1-10, 12-14	A61K31/519 A61P27/02 A61P27/06
X	LATIES A.M., FRAUNFELDER, F.T.: "Ocular safety of Viagra, (Sildenafil citrate)" TRANSACTIONS OF THE AMERICAN OPHTHALMOLOGICAL SOCIETY, vol. 97, 1999, pages 115-128, XP000981840 * abstract * * page 116, paragraph 3 - page 118, paragraph 3 * * page 119, paragraph 1 - paragraph 3 * * page 120, paragraph 2 - page 121, paragraph 3 * * page 124, paragraph 2 * -- -/-	1-10, 12-14	TECHNICAL FIELDS SEARCHED (Int.Cl.7) A61K
INCOMPLETE SEARCH			
<p>The Search Division considers that the present application, or one or more of its claims, does/do not comply with the EPC to such an extent that a meaningful search into the state of the art cannot be carried out, or can only be carried out partially, for these claims.</p> <p>Claims searched completely :</p> <p>Claims searched incompletely :</p> <p>Claims not searched :</p> <p>Reason for the limitation of the search:</p> <p>see sheet C</p>			
Place of search		Date of completion of the search	Examiner
THE HAGUE		21 February 2001	Cielen, E
CATEGORY OF CITED DOCUMENTS			
<p>X : particularly relevant if taken alone</p> <p>Y : particularly relevant if combined with another document of the same category</p> <p>A : technological background</p> <p>O : non-written disclosure</p> <p>P : intermediate document</p>		<p>T : theory or principle underlying the invention</p> <p>E : earlier patent document, but published on, or after the filing date</p> <p>D : document cited in the application</p> <p>L : document cited for other reasons</p> <p>& : member of the same patent family, corresponding document</p>	

EPO FORM 1603 03 82 (P04007)



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PARTIAL EUROPEAN SEARCH REPORT

Application Number
EP 00 30 6235

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D,X	EP 0 636 626 A (GLAXO LAB SA) 1 February 1995 (1995-02-01) * abstract * * page 5, line 52 - page 6, line 33 * * claims 1,11,13 * ---	1,12-14	TECHNICAL FIELDS SEARCHED (Int.Cl.7)
X	US 5 079 253 A (HOYNG PHILIP ET AL) 7 January 1992 (1992-01-07) * abstract * * column 1, line 5 - line 26 * * column 2, line 62 - column 3, line 43 * * column 4, line 21 - line 27 * --- -/-	1,12-14	



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PARTIAL EUROPEAN SEARCH REPORT

Application Number
EP 00 30 6235

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A	<p>MORELAND ROBERT B ET AL: "Sildenafil citrate, a selective phosphodiesterase type 5 inhibitor: Research and clinical implications in erectile dysfunction." TRENDS IN ENDOCRINOLOGY AND METABOLISM, vol. 10, no. 3, April 1999 (1999-04), pages 97-104, XP000982967 ISSN: 1043-2760 * abstract * * page 100, column 2, paragraph 2 - column 3, paragraph 1 * * page 101, column 2, paragraph 3 * * page 101, column 3, paragraph 2 * * page 102, column 1, paragraph 2 *</p>		
A	<p>DREYER ET AL: "Excitatory aminoacids in glaucoma: a potentially novel etiology of neuronal loss in this optic neuropathy" SOCIETY FOR NEUROSCIENCE ABSTRACTS, US, SOCIETY FOR NEUROSCIENCE, vol. 18, no. 1/02, 26 October 1992 (1992-10-26), page 439 XP002082715 ISSN: 0190-5295 * the whole document *</p>		TECHNICAL FIELDS SEARCHED (Int.Cl.7)
P,X	<p>WO 00 00199 A (ROMEO VINCENT D ;BEHL CHARANJIT R (US); NASTECH PHARM CO (US)) 6 January 2000 (2000-01-06) * page 3, line 1 - line 9 * * page 5, line 30 - page 6, line 7 * * page 9, line 6 - line 19 * * claims 15,17,22 *</p>	1-10, 12-14	
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European Patent
Office

PARTIAL EUROPEAN SEARCH REPORT

Application Number

EP 00 30 6235

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
P, A	SPONSEL W.E., SANDOVAL S. ET AL.: "Effects of Sildenafil (Viagra) on ocular perfusion and contrast sensitivity" IOVS ANNUAL MEETING OF THE ASSOCIATION FOR RESEARCH IN VISION AND OPHTHALMOLOGY. FORT LAUDERDALE, FLORIDA, USA, APRIL 30 - MAY 05, 2000, XP000986405 * the whole document *	1-13	
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EPO FORM 1503 01.02 (P04C10)



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INCOMPLETE SEARCH
SHEET C

Application Number

EP 00 30 6235

Claim(s) searched completely:
2-10

Claim(s) searched incompletely:
1, 11-15

Reason for the limitation of the search:

Present claims 1, 11-15 relate to a compound defined by reference to a desirable characteristic or property, namely "a cyclic guanosine 3', 5'-monophosphate phosphodiesterase type 5 inhibitor". The claims cover all compounds having this characteristic or property, whereas the application provides support within the meaning of Article 84 EPC and/or disclosure within the meaning of Article 83 EPC for only a very limited number of such compounds. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Independent of the above reasoning, the claims also lack clarity (Article 84 EPC). An attempt is made to define the compound by reference to a result to be achieved. Again, this lack of clarity in the present case is such as to render a meaningful search over the whole of the claimed scope impossible. Consequently, the search has been carried out for those parts of the claims which appear to be clear, supported and disclosed, namely those parts relating to the compounds disclosed in claims 2-7.

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EP 00 30 6235

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EPO FORM P0459

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82